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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,600

12/23/2005

Dimitri Peter Zafiroglu

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EXAMINER

MATZEK, MATTHEW D

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

08/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,600	Applicant(s) ZAFIROGLU, DIMITRI PETER	
	Examiner MATTHEW D. MATZEK	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-48 and 50-55 is/are pending in the application.
- 4a) Of the above claim(s) 41,48 and 50-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39,40,42-47,54 and 55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/08;3/06</u> | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Claims 41, 48, 50-53 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/21/2008.
2. Claims 1-38 and 49 have been cancelled by Applicant.
3. Claims 39, 40, 42-47, 54 and 55 are currently active. Applicant is directed to correct the claim status modifiers to reflect their updated status.
4. Applicant's election with traverse of claims 39, 40, 42-47, 54 and 55 in the reply filed on 6/6/2006 is acknowledged. The traversal is on the ground(s) that the restricted claims must be independent or distinct and the search would pose a serious burden to the examiner. This is not found persuasive because this application has been filed as a national stage application (i.e. 371) of PCT/US04/23032 and as such PCT restriction practices have been relied upon for this restriction.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 39, 40 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidles (US 4,888,228).

a. Sidles discloses a composite laminate comprising matrix bound plies having interlocked transverse fibers. Examiner equates the claimed fibrous face layer to Sidles' woven substrate (**24, 26**) and the claimed adhesive to the resin below said woven substrate as illustrated in Figure 2. The needle-punched nonwoven fabric with legs extending away from the top surface of the fibrous face layer and through the bottom surface of the fibrous face layer are represented by **30, 32, 34**. The adhesive layer is thermally set and at least partially penetrates into the fibrous face layer (col. 1, lines 40-49). Figure 3 illustrates that a plurality of plies may be stacked and the fibers of opposing plies are aligned so that through the curing process they become bonded to one another (col. 4, lines 50-62). The lower ply **20** illustrated in Figure 3 serves as the claimed backing layer. Claim 42 is rejected as the composite takes form with the application of heat and pressure. The figures of Sidles illustrate the top portion of the fibrous face layer as being embedded in polymeric adhesive. However, Sidles teaches that only at least one side needs to be coated with binder and that when a plurality of the plies are stacked together there is binder between layers. Therefore, the top portion of the fibrous face layer is substantially free of adhesive. The woven substrate may be replaced with knit or nonwoven fabrics. The substrate layer may be made of polyester, nylon and aramid fibers (col. 3, lines 5-57). Claim 45 is rejected as Figure 3 illustrates that the legs of the fibrous face layer physically integrated into the backing layer. While the reference does not explicitly state that the legs are needle punched into the backing layer the legs do become integrated with the backing layer in the same manner as if at least some of them had been needle punched into the backing layer.

- b. Sidles fails to explicitly disclose the depth in which the adhesive layer penetrates the fibrous face layer. The relative depth in which the adhesive layer penetrates the fibrous face is a result-effective variable affecting the strength of the composite (col. 3, lines 14-45). Consequently, absent a clear and convincing showing of unexpected results demonstrating the criticality of the impregnation depth, it would have been obvious to one of ordinary skill in the art to optimize this result-effective variable by routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).
6. Claims 46, 47 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidles (US 4,888,228) as applied to claim 39 above, and further in view of Ladeur (EP 0 547 533). Sidles fails to teach or suggest the use of gathered fabrics in the fibrous face layer.
- a. Ladeur teach a floor covering comprising a base fabric **1** (fibrous face layer) and pile fibers **2** that make up a face layer with a plurality of legs dependent said face layer (Abstract and Figures). The base or ground fabric **1** may be a nonwoven fabric. Said nonwoven may stitch-bonded or melt-blown and the nonwoven may be gathered (consolidated) (page 6). The tufted pile may be in the form of closed loops or as trimmed nap (page 8). The pile and nonwoven layers represent the claimed fibrous face layer. Below the face layer is an adhesive layer **3**. Applicant requires a solid adhesive film or fabric. Examiner takes the position that the adhesive layer of Ladeur serves as a film and that the final product has a solid adhesive layer and as such meets the claimed solid adhesive film or fabric. The pile is needled through the face layer (claim 1) and has downwardly facing fiber loops with free fiber ends that extend into the adhesive layer. It is highly desirable that the adhesive used to bind the facing and backing layers along with

said layers are all of the same type of polymers so that the article remains recyclable (page 5). The consolidated fabric may be stitch-bonded with shrinkable yarns (page 6).

b. Since Sidles and Ladeur are from the same field of endeavor (i.e. fabric composites), the purpose disclosed by Ladeur would have been recognized in the pertinent art of Sidles.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Sidles with the fabric of Ladeur motivated by the desire to form a structurally reinforced composite as disclosed by Ladeur as a floor covering.

7. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sidles (US 4,888,228) as applied to claim 39 above, and further in view of Kimbrell, Jr. et al. (US 6,899,923 B2). Sidles fails to provide for the embossment of the fibrous face layer.

a. Kimbrell, Jr. et al. disclose substrates that possess wash durable oil and water repellency and stain release features (abstract). The imparting of these properties onto a substrate comes from applying various coatings (col. 7, lines 1-11) and may further include mechanical treatments such as embossment (col. 12, lines 12-31).

b. Since Sidles and Kimbrell, Jr. are from the same field of endeavor (i.e. fabric composites), the purpose disclosed by Kimbrell, Jr. would have been recognized in the pertinent art of Sidles.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Sidles with the embossment of

Kimbrell, Jr. with the motivation of enhancing the aesthetic of fabric's face as disclosed by (Kimbrell, Jr., col. 12, lines 23-26).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW D. MATZEK whose telephone number is (571)272-2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571.272.1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/
Examiner, Art Unit 1794

//Arti Singh//
Primary Examiner, Art Unit 1794